

SEQUENCE LISTING

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<220>
50 <223> N-terminal IL11-albumin fusion

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 85 90 95
 10 Thr Arg Leu Arg Ala Asp Leu Leu Ser Tyr Leu Arg His Val Gln Trp
 100 105 110
 15 Leu Arg Arg Ala Gly Gly Ser Ser Leu Lys Thr Leu Glu Pro Glu Leu
 115 120 125
 Gly Thr Leu Gln Ala Arg Leu Asp Arg Leu Leu Arg Arg Leu Gln Leu
 130 135 140
 20 Leu Met Ser Arg Leu Ala Leu Pro Gln Pro Pro Pro Asp Pro Pro Ala
 145 150 155 160
 Pro Pro Leu Ala Pro Pro Ser Ser Ala Trp Gly Gly Ile Arg Ala Ala
 165 170 175
 25 His Ala Ile Leu Gly Gly Leu His Leu Thr Leu Asp Trp Ala Val Arg
 180 185 190
 30 Gly Leu Leu Leu Leu Lys Thr Arg Leu Asp Ala His Lys Ser Glu Val
 195 200 205
 Ala His Arg Phe Lys Asp Leu Gly Glu Glu Asn Phe Lys Ala Leu Val
 210 215 220
 35 Leu Ile Ala Phe Ala Gln Tyr Leu Gln Gln Cys Pro Phe Glu Asp His
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 Val Lys Leu Val Asn Glu Val Thr Glu Phe Ala Lys Thr Cys Val Ala
 245 250 255
 40 Asp Glu Ser Ala Glu Asn Cys Asp Lys Ser Leu His Thr Leu Phe Gly
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 45 Asp Lys Leu Cys Thr Val Ala Thr Leu Arg Glu Thr Tyr Gly Glu Met
 275 280 285
 Ala Asp Cys Cys Ala Lys Gln Glu Pro Glu Arg Asn Glu Cys Phe Leu
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 Ser Lys Leu Val Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His
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 15 Gly Asp Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr
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 Gly Met Phe Leu Tyr Glu Tyr Ala Arg Arg His Pro Asp Tyr Ser Val
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 45 Leu Val Arg Tyr Thr Lys Lys Val Pro Gln Val Ser Thr Pro Thr Leu
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 50 Val Glu Val Ser Arg Asn Leu Gly Lys Val Gly Ser Lys Cys Cys Lys
 625 630 635 640
 His Pro Glu Ala Lys Arg Met Pro Cys Ala Glu Asp Tyr Leu Ser Val
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 55 Val Leu Asn Gln Leu Cys Val Leu His Glu Lys Thr Pro Val Ser Asp
 660 665 670
 Arg Val Thr Lys Cys Cys Thr Glu Ser Leu Val Asn Arg Arg Pro Cys
 675 680 685
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Phe Ser Ala Leu Glu Val Asp Glu Thr Tyr Val Pro Lys Glu Phe Asn
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 Glu Arg Gln Ile Lys Lys Gln Thr Ala Leu Val Glu Leu Val Lys His
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 10 Lys Pro Lys Ala Thr Lys Glu Gln Leu Lys Ala Val Met Asp Asp Phe
 740 745 750
 15 Ala Ala Phe Val Glu Lys Cys Cys Lys Ala Asp Asp Lys Glu Thr Cys
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 25 <212> PRT
 <213> Artificial Sequence
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 <223> Mature N-terminal IL11-albumin fusion
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 20 25 30
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 35 40 45
 40 Asn Leu Asp Ser Leu Pro Thr Leu Ala Met Ser Ala Gly Ala Leu Gly
 50 55 60
 45 Ala Leu Gln Leu Pro Gly Val Leu Thr Arg Leu Arg Ala Asp Leu Leu
 65 70 75 80
 Ser Tyr Leu Arg His Val Gln Trp Leu Arg Arg Ala Gly Gly Ser Ser
 85 90 95
 50 Leu Lys Thr Leu Glu Pro Glu Leu Gly Thr Leu Gln Ala Arg Leu Asp
 100 105 110
 Arg Leu Leu Arg Arg Leu Gln Leu Leu Met Ser Arg Leu Ala Leu Pro
 115 120 125
 55 Gln Pro Pro Pro Asp Pro Pro Ala Pro Pro Leu Ala Pro Pro Ser Ser
 130 135 140
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 145 150 155 160

Leu Thr Leu Asp Trp Ala Val Arg Gly Leu Leu Leu Leu Lys Thr Arg
 165 170 175
 5 Leu Asp Ala His Lys Ser Glu Val Ala His Arg Phe Lys Asp Leu Gly
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 10 Gln Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr
 210 215 220
 Glu Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp
 15 225 230 235 240
 Lys Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr
 245 250 255
 20 Leu Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu
 260 265 270
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 30 305 310 315 320
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60

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55	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	
					325					330					335		
	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	
60				340					345					350			

	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	
			355					360					365				
5	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	
			370				375					380					
	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	
	385					390					395					400	
10	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	
					405					410					415		
	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	
15				420				425						430			
	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	
			435					440					445				
20	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	
	450					455						460					
	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	
	465					470					475					480	
25	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	
					485					490					495		
	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	
30				500					505					510			
	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	
			515					520					525				
35	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	
			530				535					540					
	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	Leu	Val	Glu	Leu	Val	Lys	His	Lys	
	545					550					555					560	
40	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	
					565					570					575		
	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	
45				580					585					590			
	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	
			595					600					605				
50	Leu	Pro	Gly	Pro	Pro	Pro	Gly	Pro	Pro	Arg	Val	Ser	Pro	Asp	Pro	Arg	
	610						615					620					
	Ala	Glu	Leu	Asp	Ser	Thr	Val	Leu	Leu	Thr	Arg	Ser	Leu	Leu	Ala	Asp	
	625					630					635					640	
55	Thr	Arg	Gln	Leu	Ala	Ala	Gln	Leu	Arg	Asp	Lys	Phe	Pro	Ala	Asp	Gly	
					645					650					655		
	Asp	His	Asn	Leu	Asp	Ser	Leu	Pro	Thr	Leu	Ala	Met	Ser	Ala	Gly	Ala	
60				660					665					670			

Leu Gly Ala Leu Gln Leu Pro Gly Val Leu Thr Arg Leu Arg Ala Asp
 675 680 685
 5 Leu Leu Ser Tyr Leu Arg His Val Gln Trp Leu Arg Arg Ala Gly Gly
 690 695 700
 Ser Ser Leu Lys Thr Leu Glu Pro Glu Leu Gly Thr Leu Gln Ala Arg
 705 710 715 720
 10 Leu Asp Arg Leu Leu Arg Arg Leu Gln Leu Leu Met Ser Arg Leu Ala
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 Leu Pro Gln Pro Pro Pro Asp Pro Pro Ala Pro Pro Leu Ala Pro Pro
 740 745 750
 15 Ser Ser Ala Trp Gly Gly Ile Arg Ala Ala His Ala Ile Leu Gly Gly
 755 760 765
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 20 25 30
 40 Gln Cys Pro Phe Glu Asp His Val Lys Leu Val Asn Glu Val Thr Glu
 35 40 45
 Phe Ala Lys Thr Cys Val Ala Asp Glu Ser Ala Glu Asn Cys Asp Lys
 50 55 60
 45 Ser Leu His Thr Leu Phe Gly Asp Lys Leu Cys Thr Val Ala Thr Leu
 65 70 75 80
 Arg Glu Thr Tyr Gly Glu Met Ala Asp Cys Cys Ala Lys Gln Glu Pro
 85 90 95
 50 Glu Arg Asn Glu Cys Phe Leu Gln His Lys Asp Asp Asn Pro Asn Leu
 100 105 110
 55 Pro Arg Leu Val Arg Pro Glu Val Asp Val Met Cys Thr Ala Phe His
 115 120 125
 Asp Asn Glu Glu Thr Phe Leu Lys Lys Tyr Leu Tyr Glu Ile Ala Arg
 130 135 140
 60

	Arg	His	Pro	Tyr	Phe	Tyr	Ala	Pro	Glu	Leu	Leu	Phe	Phe	Ala	Lys	Arg	
	145					150					155					160	
5	Tyr	Lys	Ala	Ala	Phe	Thr	Glu	Cys	Cys	Gln	Ala	Ala	Asp	Lys	Ala	Ala	
					165					170					175		
	Cys	Leu	Leu	Pro	Lys	Leu	Asp	Glu	Leu	Arg	Asp	Glu	Gly	Lys	Ala	Ser	
				180					185					190			
10	Ser	Ala	Lys	Gln	Arg	Leu	Lys	Cys	Ala	Ser	Leu	Gln	Lys	Phe	Gly	Glu	
			195					200					205				
	Arg	Ala	Phe	Lys	Ala	Trp	Ala	Val	Ala	Arg	Leu	Ser	Gln	Arg	Phe	Pro	
15		210					215					220					
	Lys	Ala	Glu	Phe	Ala	Glu	Val	Ser	Lys	Leu	Val	Thr	Asp	Leu	Thr	Lys	
	225					230					235					240	
20	Val	His	Thr	Glu	Cys	Cys	His	Gly	Asp	Leu	Leu	Glu	Cys	Ala	Asp	Asp	
				245						250					255		
	Arg	Ala	Asp	Leu	Ala	Lys	Tyr	Ile	Cys	Glu	Asn	Gln	Asp	Ser	Ile	Ser	
				260					265					270			
25	Ser	Lys	Leu	Lys	Glu	Cys	Cys	Glu	Lys	Pro	Leu	Leu	Glu	Lys	Ser	His	
			275					280					285				
	Cys	Ile	Ala	Glu	Val	Glu	Asn	Asp	Glu	Met	Pro	Ala	Asp	Leu	Pro	Ser	
30		290					295					300					
	Leu	Ala	Ala	Asp	Phe	Val	Glu	Ser	Lys	Asp	Val	Cys	Lys	Asn	Tyr	Ala	
	305					310					315					320	
35	Glu	Ala	Lys	Asp	Val	Phe	Leu	Gly	Met	Phe	Leu	Tyr	Glu	Tyr	Ala	Arg	
				325						330					335		
	Arg	His	Pro	Asp	Tyr	Ser	Val	Val	Leu	Leu	Leu	Arg	Leu	Ala	Lys	Thr	
				340					345					350			
40	Tyr	Glu	Thr	Thr	Leu	Glu	Lys	Cys	Cys	Ala	Ala	Ala	Asp	Pro	His	Glu	
			355					360					365				
	Cys	Tyr	Ala	Lys	Val	Phe	Asp	Glu	Phe	Lys	Pro	Leu	Val	Glu	Glu	Pro	
45		370					375					380					
	Gln	Asn	Leu	Ile	Lys	Gln	Asn	Cys	Glu	Leu	Phe	Glu	Gln	Leu	Gly	Glu	
	385					390					395					400	
50	Tyr	Lys	Phe	Gln	Asn	Ala	Leu	Leu	Val	Arg	Tyr	Thr	Lys	Lys	Val	Pro	
				405						410					415		
	Gln	Val	Ser	Thr	Pro	Thr	Leu	Val	Glu	Val	Ser	Arg	Asn	Leu	Gly	Lys	
				420					425					430			
55	Val	Gly	Ser	Lys	Cys	Cys	Lys	His	Pro	Glu	Ala	Lys	Arg	Met	Pro	Cys	
			435					440					445				
	Ala	Glu	Asp	Tyr	Leu	Ser	Val	Val	Leu	Asn	Gln	Leu	Cys	Val	Leu	His	
60		450					455					460					

	Glu	Lys	Thr	Pro	Val	Ser	Asp	Arg	Val	Thr	Lys	Cys	Cys	Thr	Glu	Ser	
	465					470					475					480	
5	Leu	Val	Asn	Arg	Arg	Pro	Cys	Phe	Ser	Ala	Leu	Glu	Val	Asp	Glu	Thr	
					485					490					495		
	Tyr	Val	Pro	Lys	Glu	Phe	Asn	Ala	Glu	Thr	Phe	Thr	Phe	His	Ala	Asp	
				500					505					510			
10	Ile	Cys	Thr	Leu	Ser	Glu	Lys	Glu	Arg	Gln	Ile	Lys	Lys	Gln	Thr	Ala	
			515					520					525				
	Leu	Val	Glu	Leu	Val	Lys	His	Lys	Pro	Lys	Ala	Thr	Lys	Glu	Gln	Leu	
15		530					535					540					
	Lys	Ala	Val	Met	Asp	Asp	Phe	Ala	Ala	Phe	Val	Glu	Lys	Cys	Cys	Lys	
	545				550						555					560	
20	Ala	Asp	Asp	Lys	Glu	Thr	Cys	Phe	Ala	Glu	Glu	Gly	Lys	Lys	Leu	Val	
					565					570					575		
	Ala	Ala	Ser	Gln	Ala	Ala	Leu	Gly	Leu	Pro	Gly	Pro	Pro	Pro	Gly	Pro	
				580					585					590			
25	Pro	Arg	Val	Ser	Pro	Asp	Pro	Arg	Ala	Glu	Leu	Asp	Ser	Thr	Val	Leu	
			595					600					605				
	Leu	Thr	Arg	Ser	Leu	Leu	Ala	Asp	Thr	Arg	Gln	Leu	Ala	Ala	Gln	Leu	
30		610					615					620					
	Arg	Asp	Lys	Phe	Pro	Ala	Asp	Gly	Asp	His	Asn	Leu	Asp	Ser	Leu	Pro	
	625					630					635					640	
35	Thr	Leu	Ala	Met	Ser	Ala	Gly	Ala	Leu	Gly	Ala	Leu	Gln	Leu	Pro	Gly	
					645					650					655		
	Val	Leu	Thr	Arg	Leu	Arg	Ala	Asp	Leu	Leu	Ser	Tyr	Leu	Arg	His	Val	
				660					665					670			
40	Gln	Trp	Leu	Arg	Arg	Ala	Gly	Gly	Ser	Ser	Leu	Lys	Thr	Leu	Glu	Pro	
			675					680					685				
	Glu	Leu	Gly	Thr	Leu	Gln	Ala	Arg	Leu	Asp	Arg	Leu	Leu	Arg	Arg	Leu	
45		690					695					700					
	Gln	Leu	Leu	Met	Ser	Arg	Leu	Ala	Leu	Pro	Gln	Pro	Pro	Pro	Asp	Pro	
	705					710					715				720		
50	Pro	Ala	Pro	Pro	Leu	Ala	Pro	Pro	Ser	Ser	Ala	Trp	Gly	Gly	Ile	Arg	
					725					730					735		
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				740					745					750			
55	Val	Arg	Gly	Leu	Leu	Leu	Leu	Lys	Thr	Arg	Leu						
			755					760									